Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 90 of the	)	PR Docket No. 93-61
Commission's Rules to Adopt	)	RM-8013
Regulations for Automatic	)	
Vehicle Monitoring Systems	)	

To: The Commission

COMMENTS OF THE NATIONAL RETAIL FEDERATION

The National Retail Federation ("NRF"), by its attorneys, respectfully submits its comments in response to the Public Notice[1] released on February 9, 1994 in the above-captioned proceeding.

I. INTRODUCTION

NRF is the nation's largest trade group representing the retail industry. NRF represents the full spectrum of retailing, including the nation's leading department, chain, discount, specialty, and independent stores. NRF also represents several dozen national retail associations and all 50 state retail associations. NRF's membership represents an industry encompassing over 1.3 million retail establishments that employs nearly 20 million Americans and that had registered sales exceeding $1.9 trillion in 1992.

The ex parte presentations of PacTel Teletrac and Southwestern Bell Mobile Systems, Inc. are of concern to

[1] DA 94-129 (rel. Feb. 9, 1994).

NRF's membership because of the implications of licensing the emerging Location and Monitoring Service ("LHM") in the 902-928 MHz band. Since the Federal Communications Commission ("FCC" or "Commission") began encouraging the development of unlicensed Part 15 devices for operation in the 902-928 MHz band, retailers nationwide have come to rely on many of these devices for critical inventory and sales functions. If the Commission now expands the scope of permissible activities in that band to accommodate the development of a technology that is both highly susceptible to interference from co-channel users and likely to cause interference with existing services, the nation's retailers will lose the benefit of their investment in unlicensed Part 15 devices. NRF urges the Commission to consider the impact of its decision regarding LMS on this trillion dollar industry and the millions of jobs that it supports.

II. PART 15 DEVICES

A. The Commission has Encouraged the Development of Part 15 Devices and Spread Spectrum Technology

The Commission has very recently encouraged the development of Part 15 unlicensed devices for operation in the 902-928 MHz band. As part of its 1989 rewrite of Part 15 the Commission noted that the establishment of new bands, including the 902-928 MHz band, "would enable manufacturers to introduce new equipment providing major benefits to

consumers and to take advantage of new technologies without the need for Commission rule making."[2]

Moreover, in 1990 the Commission amended Part 15 to facilitate greater flexibility in the use of low power, non-licensed spread spectrum technology in the 902-928 MHz band.[3] The Commission began its Report and Order in that proceeding by noting that "new rules will significantly increase the potential range of permissible designs for Part 15 spread spectrum systems and thereby broaden the opportunities for development and use of this important new technology."[4] Indeed, the Commission even indicated that, through its new rules, the Commission "desire[d] to encourage the development and implementation of this exciting new family of technologies . . . ."[5]

B. The Private Sector has Responded with a Multitude of Part 15 and Spread Spectrum Devices

The private sector relied on the Commission's encouragement and responded by producing a multitude of Part 15 and spread spectrum devices that operate in the 902-928 MHz band. Point-to-point data links, wireless local area

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[2] Revision of Part 15 of the Rules Regarding the Operation of Radio Frequency Devices Without an Individual License, 4 FCC Rcd 3493, 3502 (1989) ("Part 15 Order").

[3] Amendment of Parts 2 and 15 of the Rules with regard to the Operation of Spread Spectrum Systems, 5 FCC Rcd 4123 (1990) ("Spread Spectrum Order").

[4] Id.

[5] Id. at 4124.

networks ("LAN"), and wireless portable data transmission systems form the backbone of a variety of applications that are crucial to contemporary business and welcomed by modern consumers.

For example, keyless remote entry devices and field disturbance sensors provide burglary and shoplifting defenses, data links enable utility companies to read utility meters from the home office, and data transmission systems make it possible for hospitals to monitor patient vital signs from central locations. Moreover, wireless private branch exchanges ("PBX") and LANs provide greater flexibility to the modern office. Finally, a new generation of cordless telephones will bring increased mobility to telephone subscribers at home and at work. Each of these applications is made possible by Part 15 and spread spectrum technology operating in the 902-928 MHz band.

C. Part 15 and Spread Spectrum Technology in the 902-928 MHz Band Provide Major Benefits to Retailers

The nation's retailers represented by NRF have embraced Part 15 and spread spectrum technology and the major benefits that their applications can provide. First, retailers employ millions of hand-held bar code laser scanners and portable computers for pricing and inventory control between the stock room and the sales floor. These devices enable retail floor personnel to examine stock on shelves or in storerooms and to determine whether additional

units are needed and when delivery can be made. These systems stabilize inventory costs by introducing greater efficiency to inventory control and help to safeguard against misplaced goods and shipments. All of this means lower prices for the consumer and an improved competitive position for the U.S. retailer.[6]

Second, retailers rely heavily on a variety of field disturbing sensor devices to prevent shoplifting and internal theft. By some estimates, annual nationwide shoplifting losses exceed $30 billion. Field disturbing sensors keep this number in check by making possible a portable security system for even the smallest items in the store. The Part 15 systems enable customers to examine and carry items around the store, but prevent would be shoplifters from leaving the store without detection. This saves billions of dollars in otherwise lost inventory each year and helps retailers to keep prices down and to stay competitive.

Retailers represented by NRF have made substantial investments in these Part 15 unlicensed devices principally because of the effectiveness of these products and the ease with which they may be put into service. On one hand, the devices are effective because they provide the flexibility

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[6] Retailers also hope to employ emerging portable/point of sale check-out units that will enable customers to pay for purchases virtually anywhere in a store.

inherent in wireless communication. On the other hand, they are unlicensed systems that do not bring regulatory baggage along with that wireless flexibility. For these reasons, the nation's retailers have made Part 15 devices and spread spectrum technology integral parts of their robust, job-supporting industry.

III. LOCATING LMS OPERATIONS IN THE 902-928 MHz BAND WILL DISCOURAGE THE USE OF PART 15 DEVICES BY RETAILERS

Although the Commission focused in the Notice of Proposed Rule Making ("NPRM") in this proceeding on the effects of Part 15 devices on LMS systems in the 902-928 MHz band,[7] a host of commenters have pointed out the effect that LMS operations will have on Part 15 operations. Indeed, if the Commission agrees to license LMS at a maximum peak effective radiated power of 300 watts,[8] it would seriously disrupt Part 15 operations in the 902-928 MHz band.

Even if Part 15 devices are not completely eliminated from the band, licensing LMS there could effectively discourage any serious research and development for unlicensed products that operate between 902 and 928 MHz. Firms that develop Part 15 devices will be unwilling to risk manufacturing a product that is highly vulnerable to

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[7] Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic 16 Vehicle Monitoring Systems, Notice of Proposed Rule Making, 8 FCC Rcd 2502, 2506 (1993) ("NPRM").

[8] Id. at 2508.

overpowering interference. In turn, large-scale consumers of Part 15 devices — such as the nation's retailers — will no longer have the choice and flexibility of a dynamic Part 15 market.

U.S. retailers have made a substantial investment in Part 15 unlicensed devices that operate in the 902-928 MHz band and the Commission's action in this proceeding could jeopardize that investment. Whether Part 15 devices are eliminated from that band altogether, or simply rendered impractical by LMS co-channel interference, the Commission could cost retailers and their customers billions of dollars in wasted investment.

IV. THE COMMISSION SHOULD CONSIDER THE RETAIL INDUSTRY'S PART 15 INVESTMENT AND RELIANCE ON COMMISSION POLICY WHEN PASSING ON LMS

The Commission plainly has made a policy decision to permit Part 15 devices to function in the 902-928 MHz band and it has encouraged the development of those devices for use by U.S. businesses and consumers.[9] The nation's retailers invested heavily in Part 15 unlicensed devices as a result. The advantages of those devices are real, they are central to the continued competitiveness of U.S. retail, and retailers will continue to invest in Part 15 unlicensed devices that are compatible with the systems already in place in thousands of retail outlets nationwide. For these

[9] See Spread Spectrum Order, 5 FCC Rcd at 4124; Part 15 Order, 4 FCC Rcd at 3502.

reasons, the Commission must consider the investment made by the retail industry in Part 15 unlicensed devices, and the impact on the industry of shifting Commission policy so soon after encouraging the development of Part 15 unlicensed devices, before it renders those systems unworkable by locating LMS in the same band.

The Commission has several options before it with regard to LMS. At the threshold, the Commission can elect not to permit the more manageable automatic vehicle monitoring systems to expand to the powerful LMS. If, as the NPRM suggests, the Commission determines that LMS is a necessary step in the development of this service,[10] then NRF urges the Commission to consider licensing this service in a bandwidth other than the already crowded and unregulated 902-928 MHz range. If LMS must operate in the 902-928 MHz band, then the Commission should consider licensing LMS on an equal, secondary basis with existing Part 15 users. In that way, Part 15 devices can remain in operation and LMS providers will be encouraged to improve the spectrum efficiency of their emerging service.

In any event, NRF urges the Commission to consider the competitive position of U.S. retailers before eliminating the utility of Part 15 unlicensed devices. After making it possible for the retail industry to embrace these systems,

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[10] NPRM at 2502, 2506.

the Commission should not now limit the viability of the many applications on which the industry has come to rely.

V. CONCLUSION

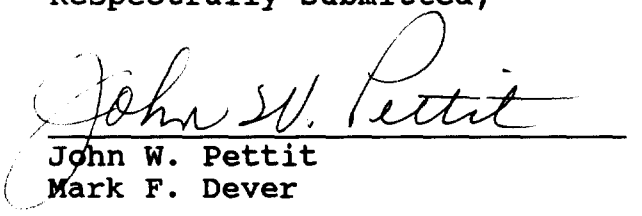
NRF's membership represents a trillion dollar industry that employs millions of Americans. Retailing is the backbone of the United States economy. To improve efficiency and stabilize costs, the nation's retailers have invested heavily in Part 15 unlicensed devices that operate in the 902-928 MHz band. Retailers have come to rely on these devices for a variety of functions.

The wisdom of that investment is now in doubt as the Commission considers whether to locate emerging LMS technology in the same bandwidth as the secondary Part 15 systems. The powerful LMS applications could render most Part 15 devices unusable and will eliminate the benefits of retailers' substantial investments in those unlicensed systems.

Although Part 15 devices may be secondary to licensed services in the same band, the policy choice of where to locate a licensed service such as LMS is a public interest determination that must weigh the benefits and detriments to existing users of the spectrum in evenhanded fashion. Thus, the Commission must not act on the emerging LMS technology without considering the impact of its decision on the nation's retailers.

The retail market is massive, and the investment by retailers in Part 15 unlicensed devices has been similarly large. To locate LMS in the same bandwidth in such a way as to render the millions of Part 15 unlicensed devices in the hands of retailers useless will be a blow to the retail industry. NRF urges the Commission to consider this industry when deciding the fate of Part 15 devices in the 902-928 MHz band.

Respectfully submitted,



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